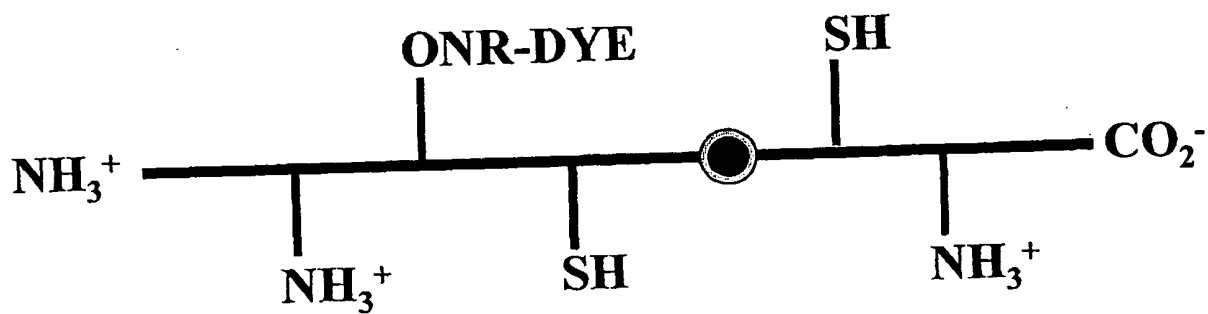
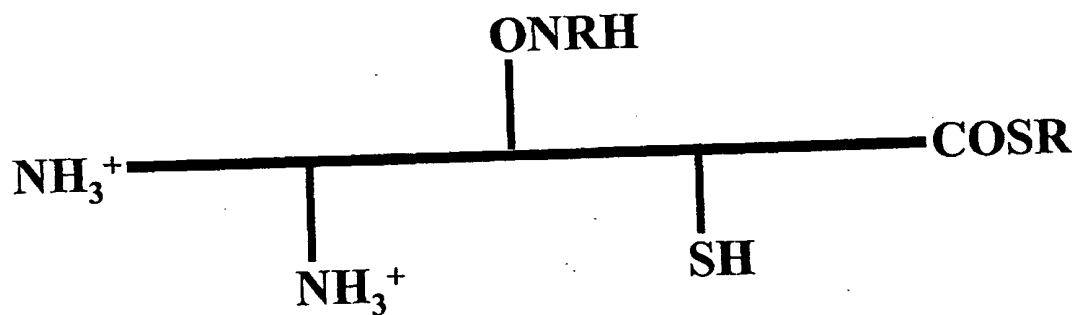
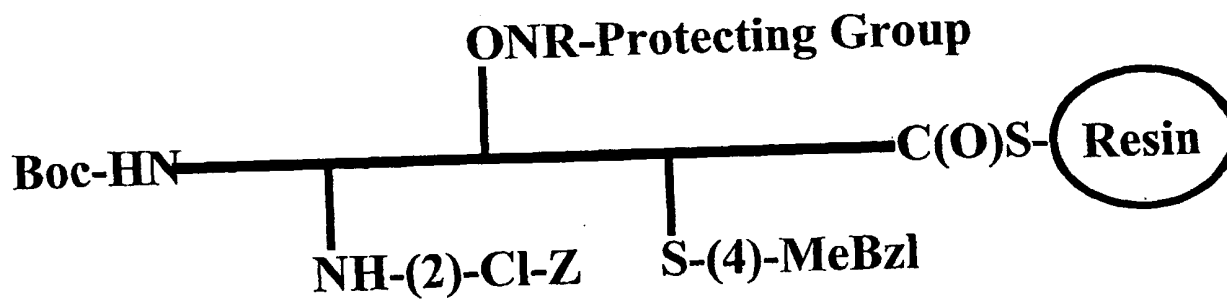
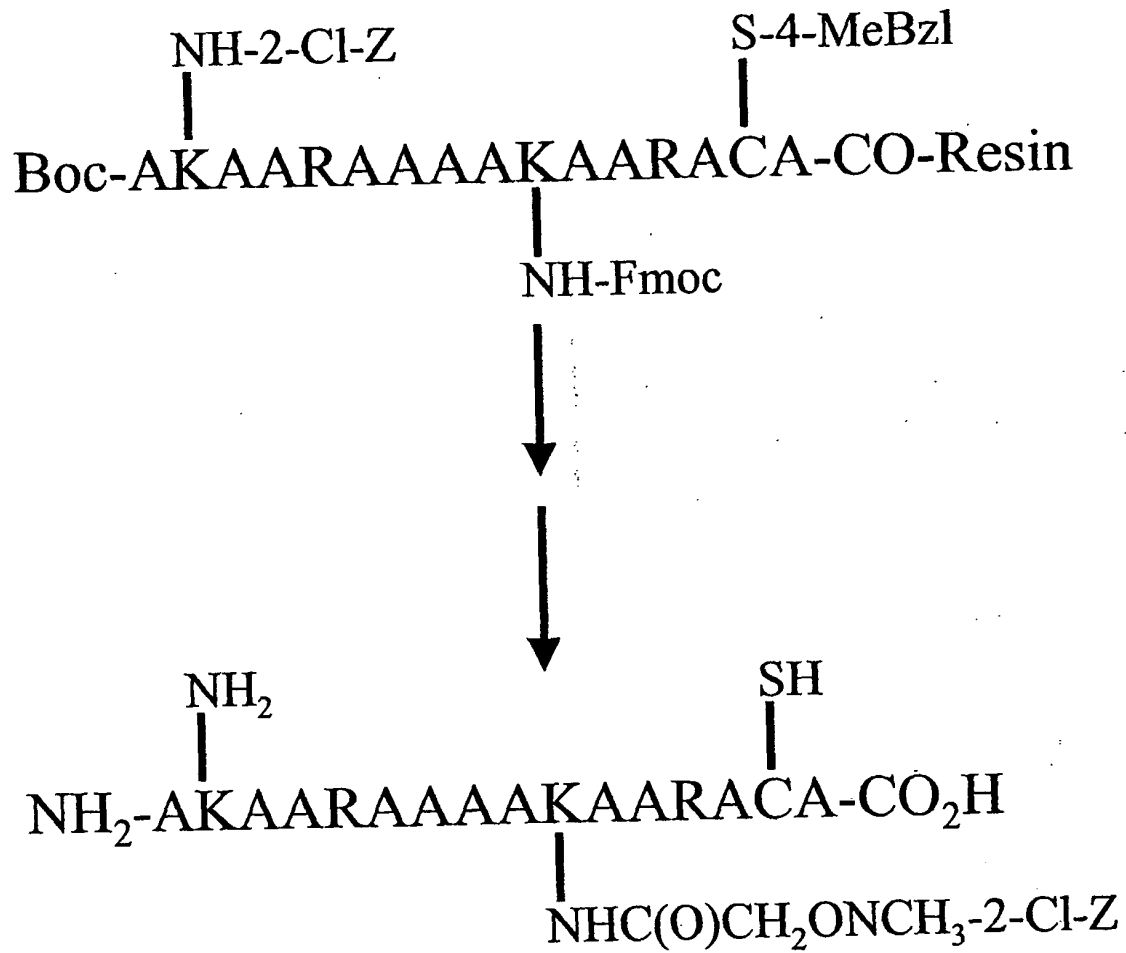


Figure 1



FOOD-40-2256E860

Figure 2



SA-Test Peptide

Figure 3

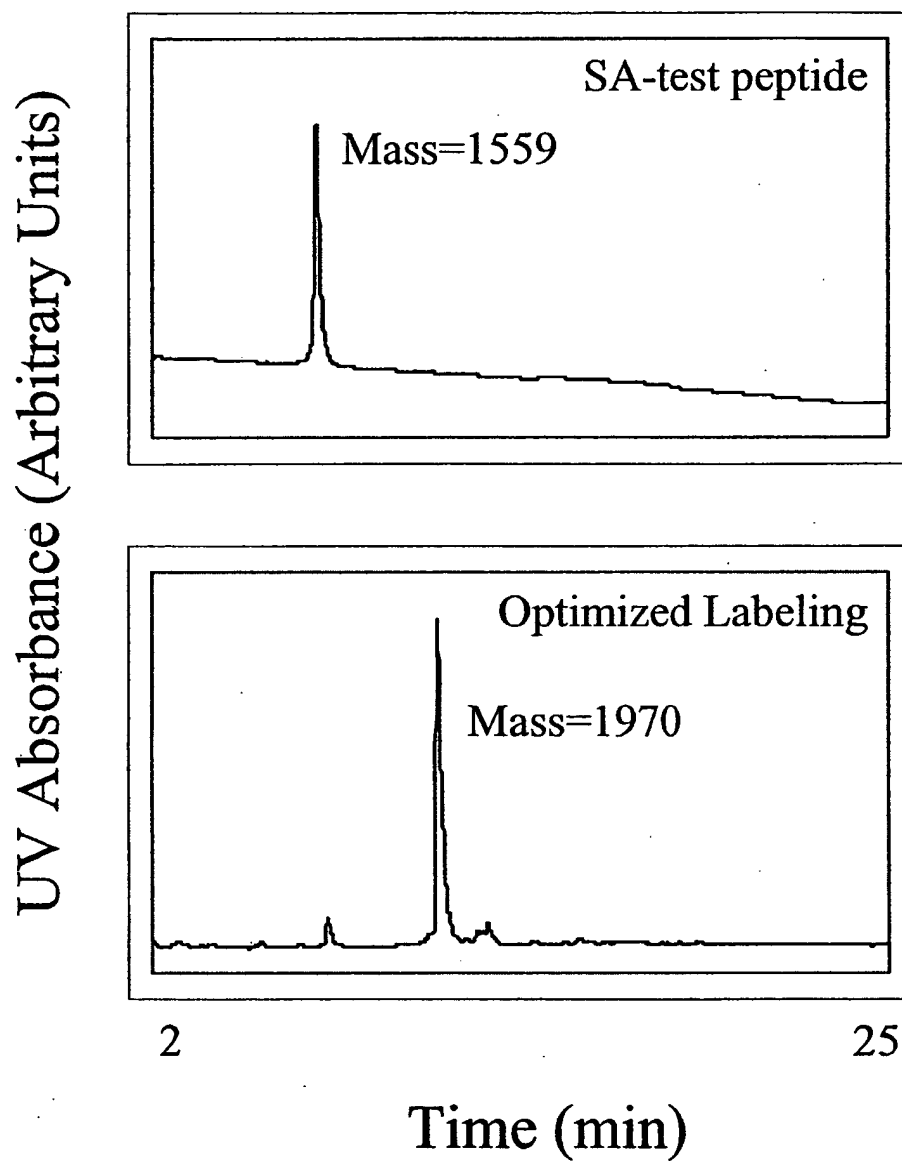
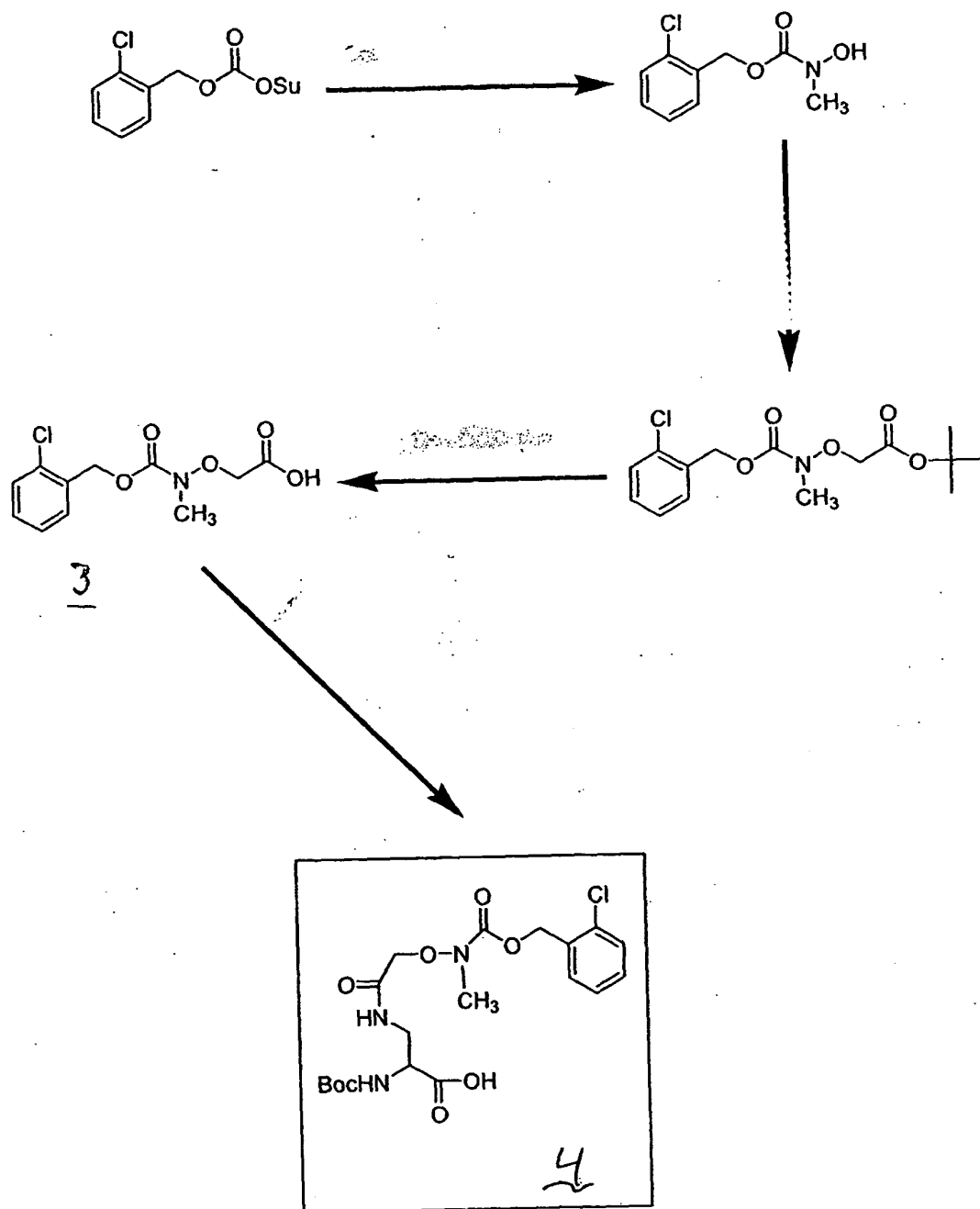


Figure 4



100240" 2256860

Figure 5

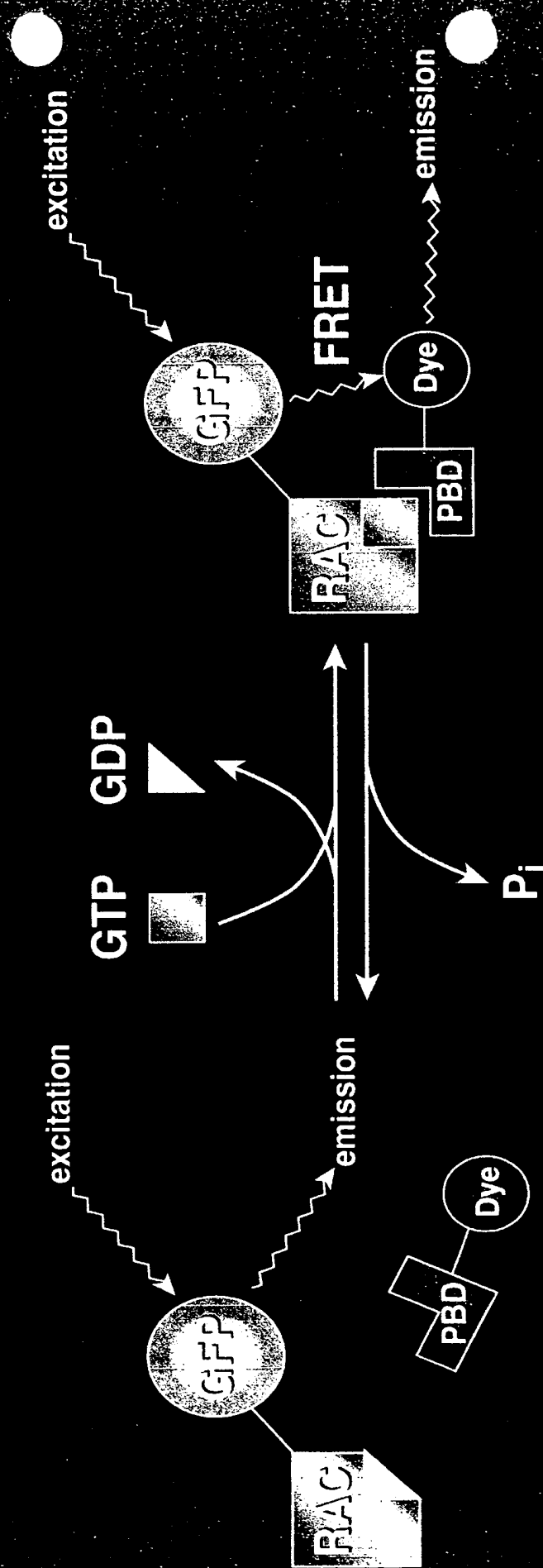


Fig. 6a

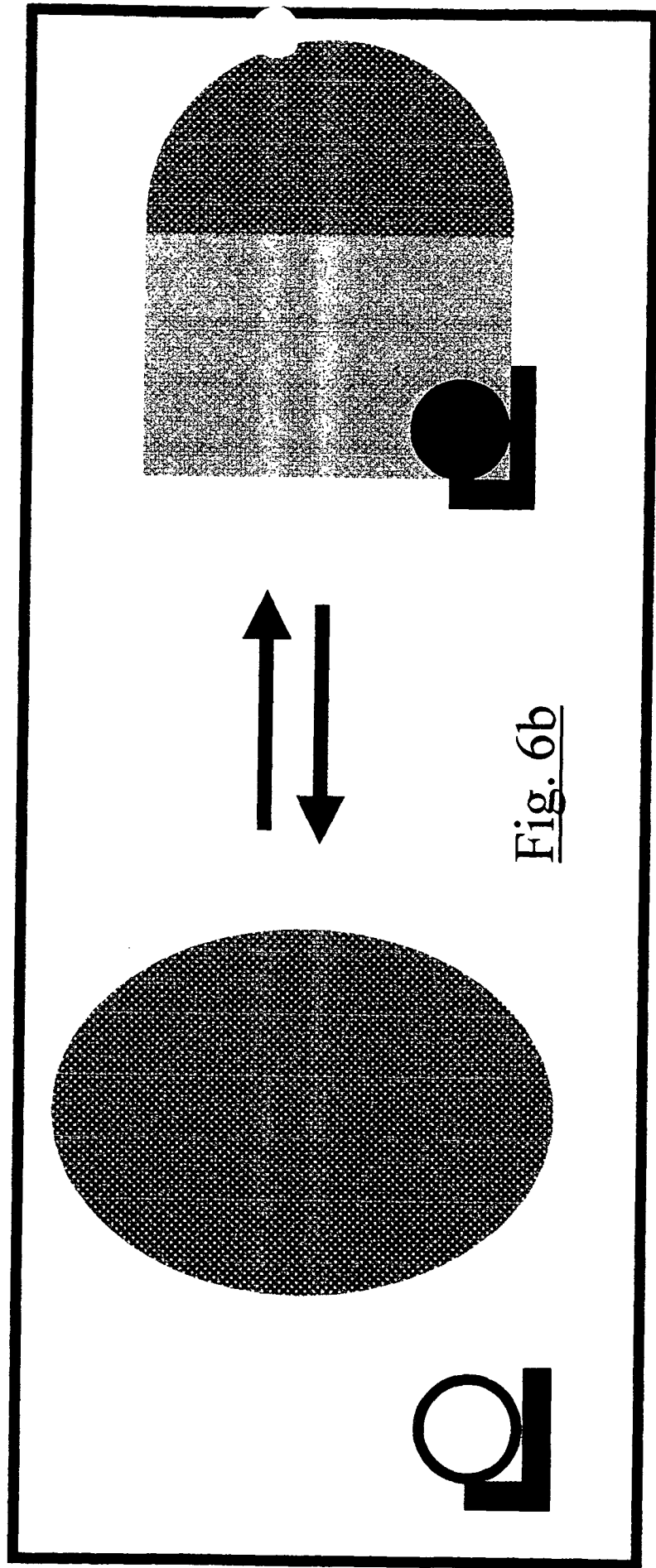
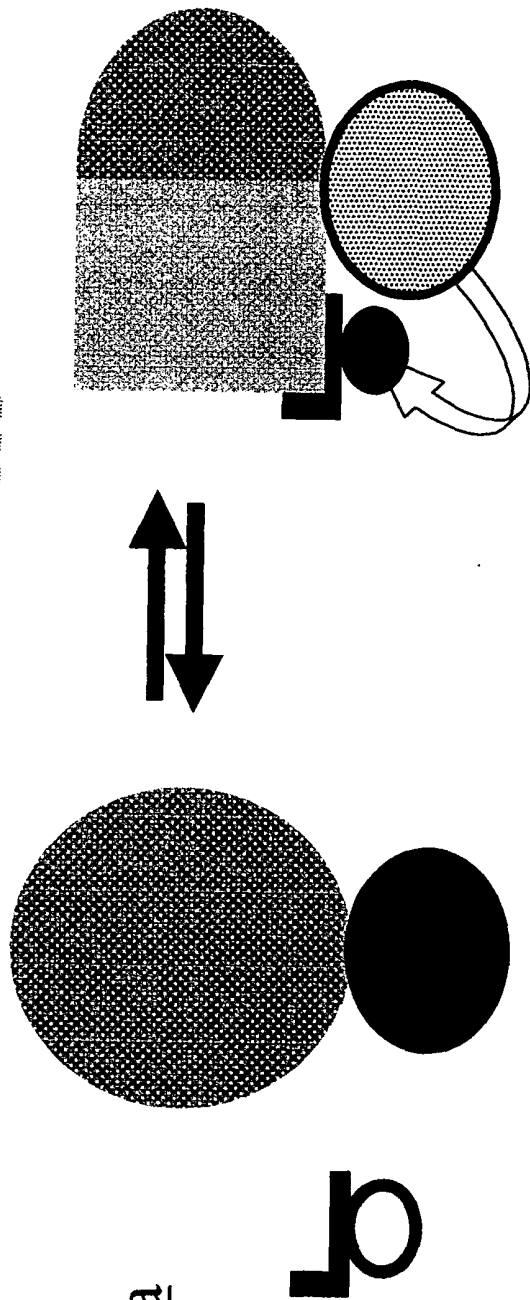


Fig. 6b

Figure 7A: GFP-Rac to Alexa-PBD FRET

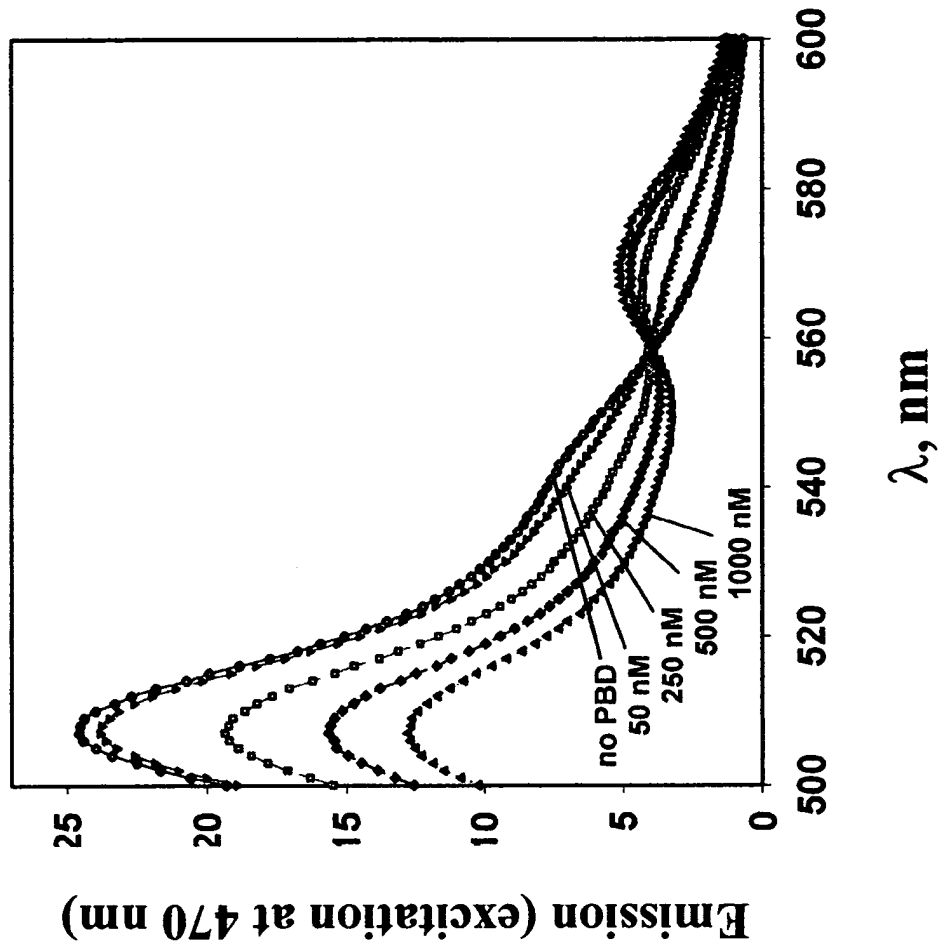


Figure 7B: FRET response to nucleotide state of Rac-GFP

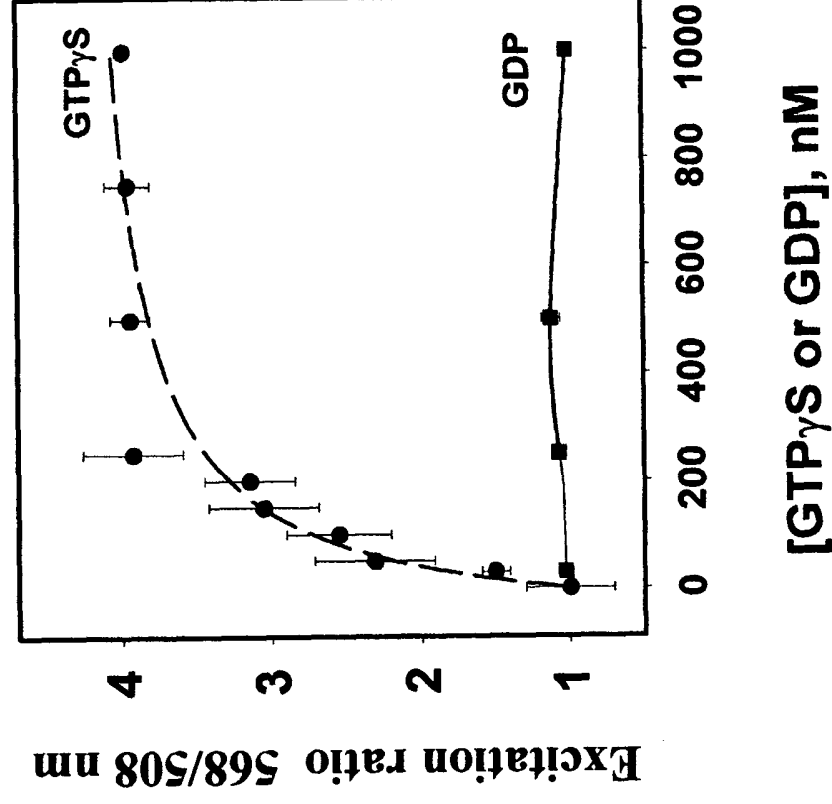
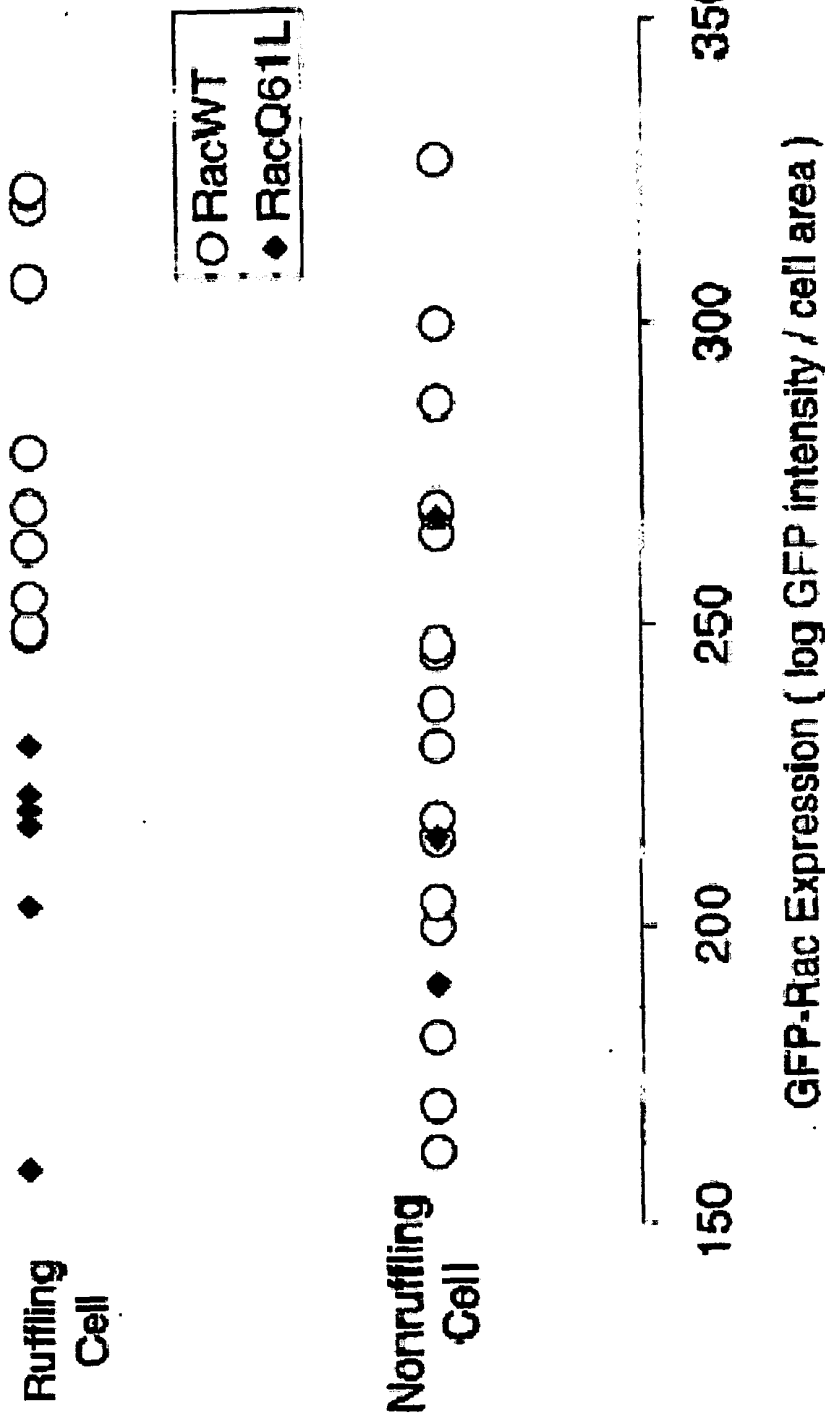


Fig. 8A

Individual cells scored for Rac-Induced ruffling



Individual cells scored for PBD inhibition of ruffle induction

Ruffling
Cell



Nonruffling
Cell



0 200 400 600

Intracellular Alexa-PBD
(Alexa intensity / cell area)

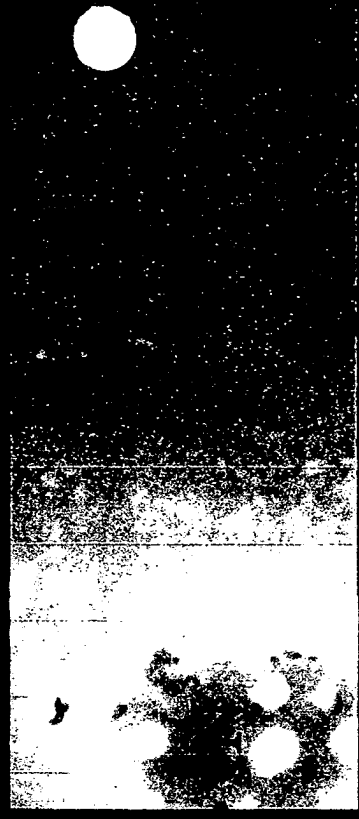
Figure 8B

Fig. 9 A and 9B: Serum stimulation of a Swiss 3T3 fibroblast

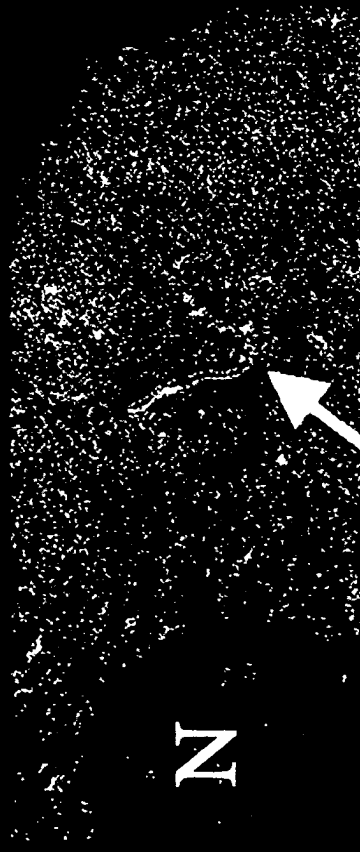
A. FRET



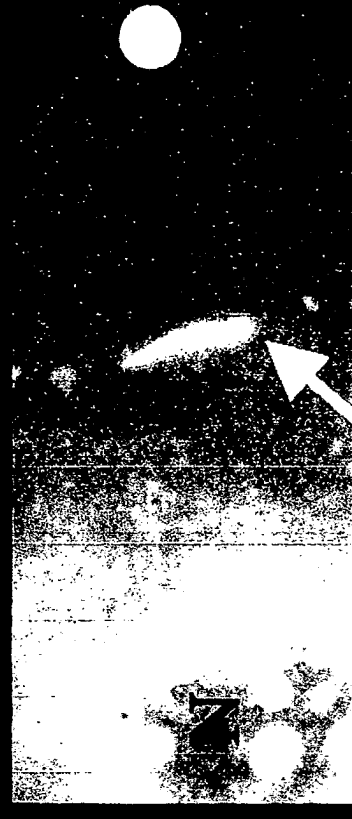
GFP-Rac



B. After



Ruffle

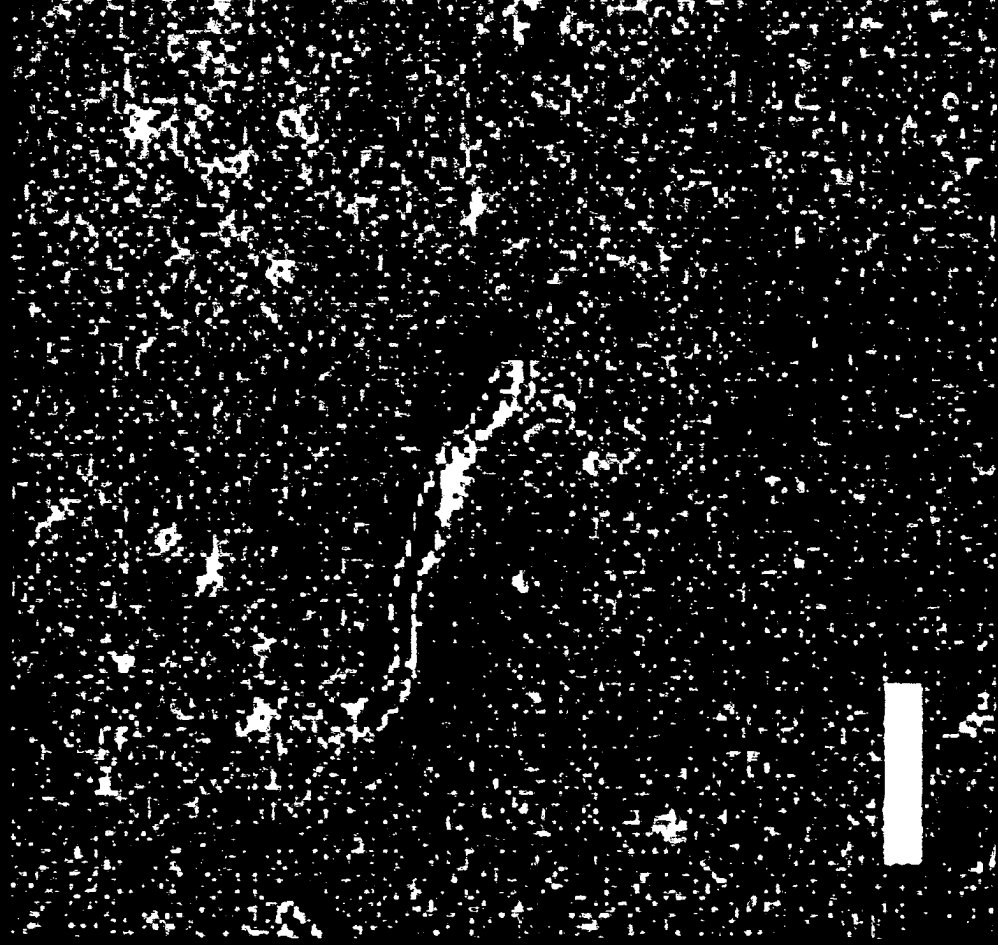


Ruffle

Fig. 9C and 9D: The same ruffle visualized using
either FRET or Alexa-PBD localization:

C. FRET

intensity = 0-84



D. Alexa-PBD

intensity = 88-345

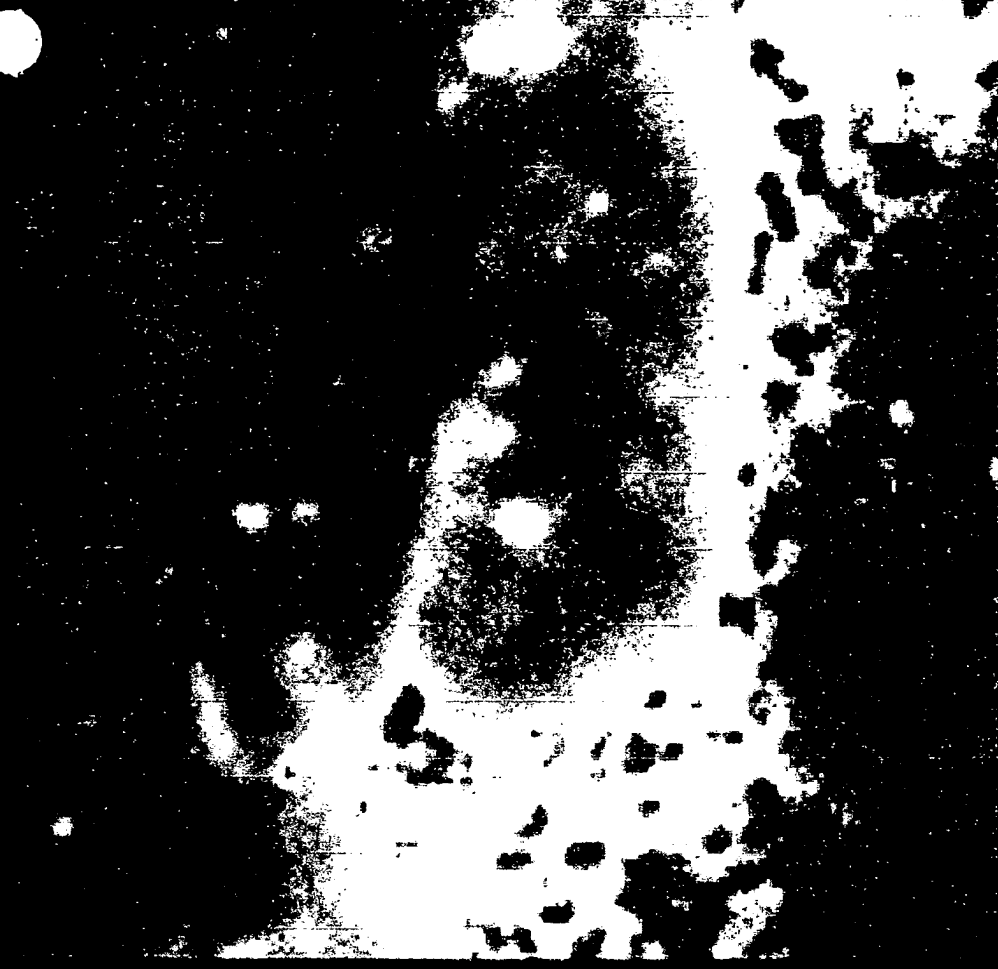
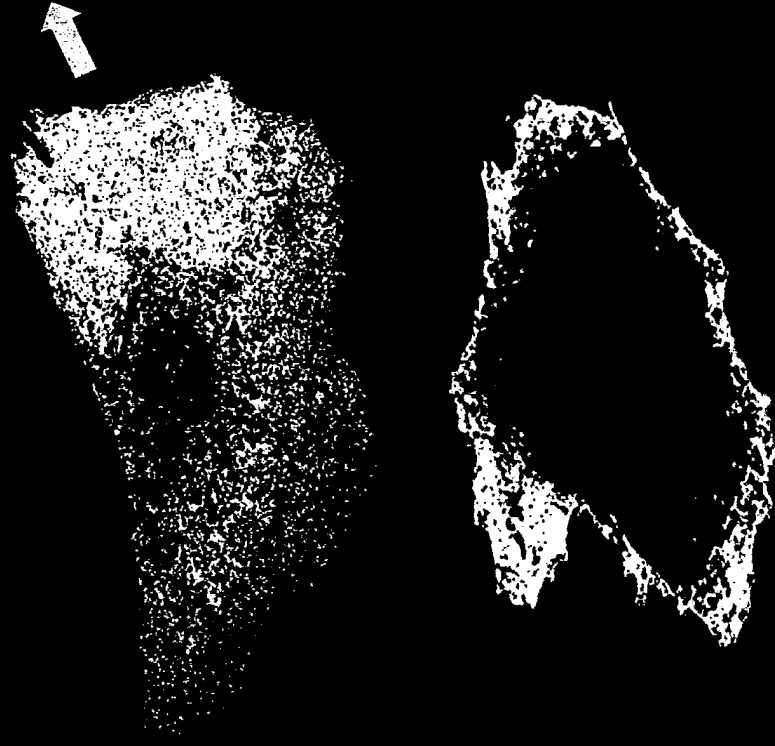


Fig. 10A: Rac-GFP

Fig. 10B: FRET

Wound healing

Confluent
monolayer



Magnitude of gradient when highest at front

128 +/- 51 %

n=12

Magnitude of gradient highest at rear

9 +/- 4 %

n=4

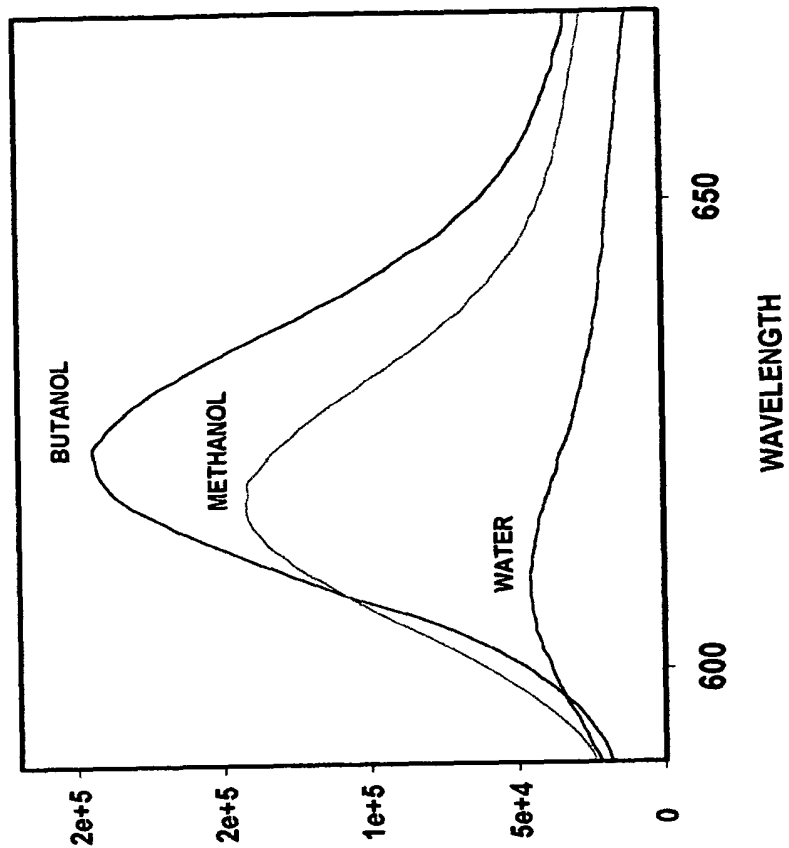
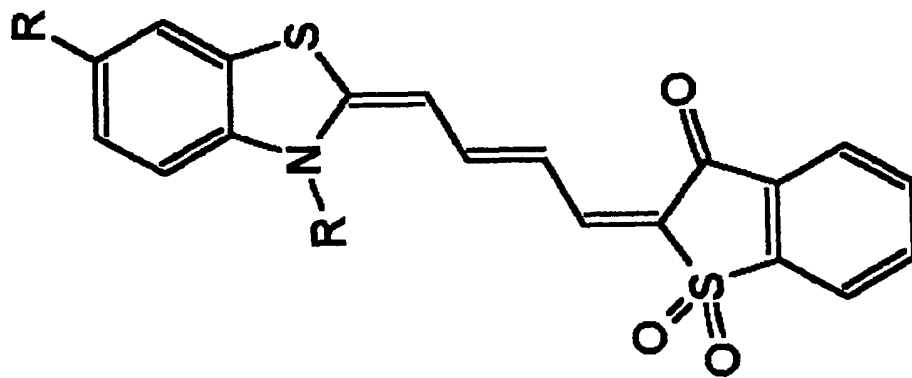


Figure 11

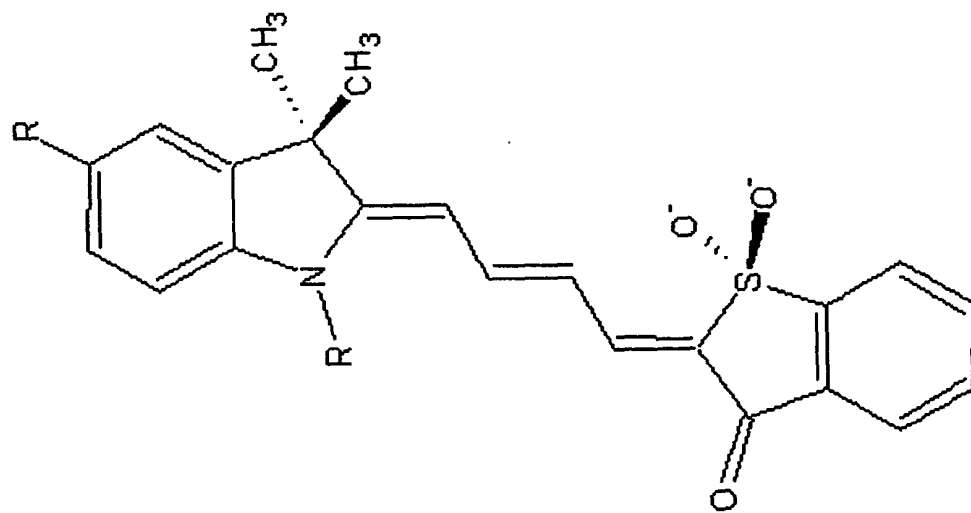


Figure 12

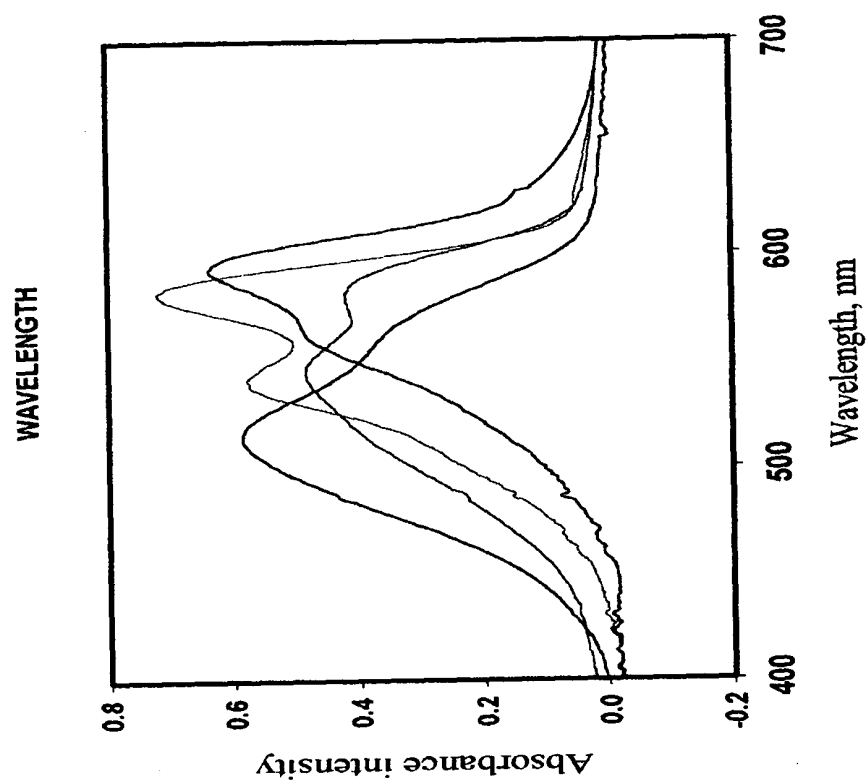


Figure 13: Convergent synthesis of merocyanine dyes

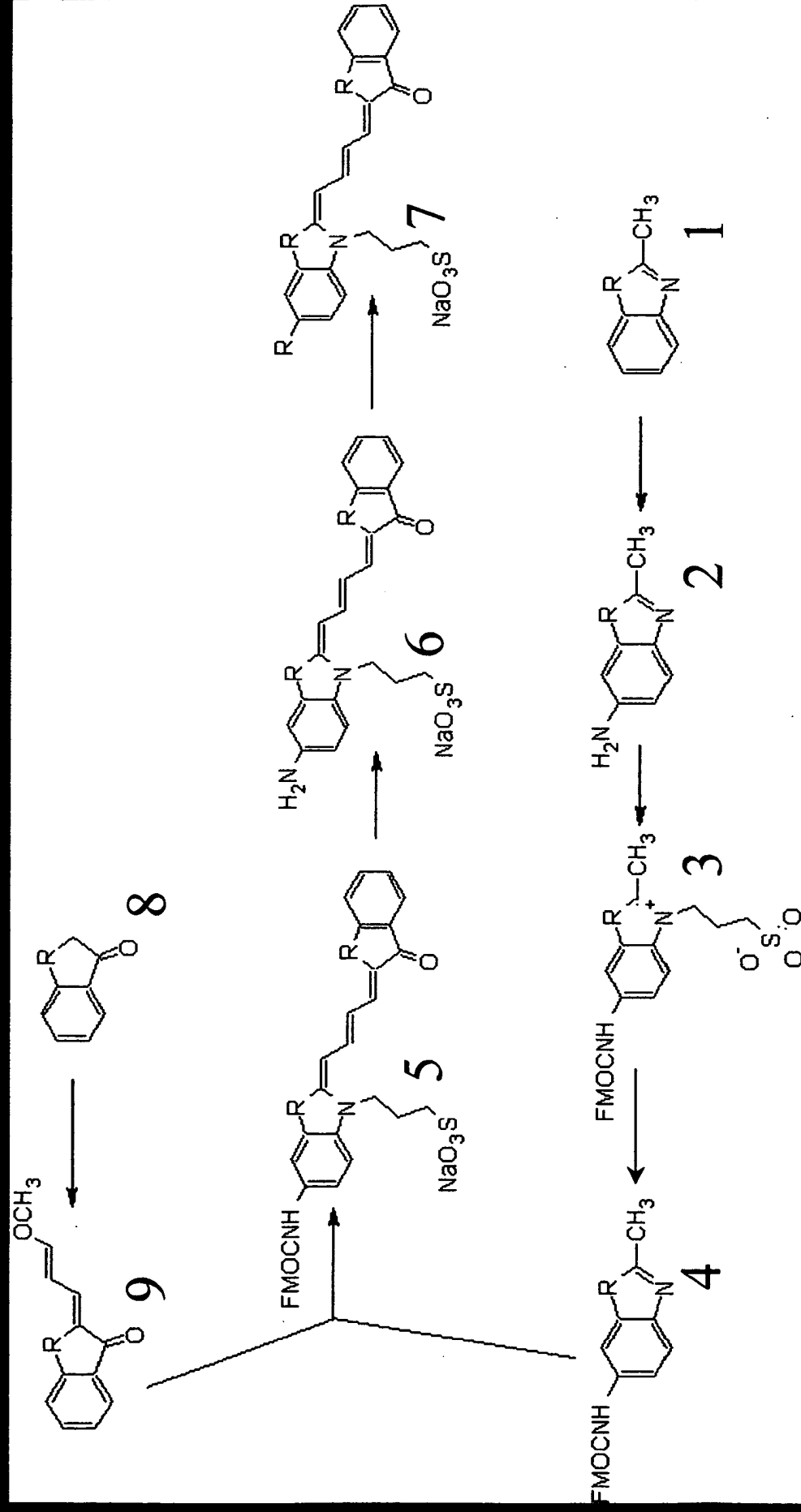


Figure 14:

“CBD” (WASP CRIB domain)



essential residues



sites of dye attachment



hydrophobic amino acids

Cdc42

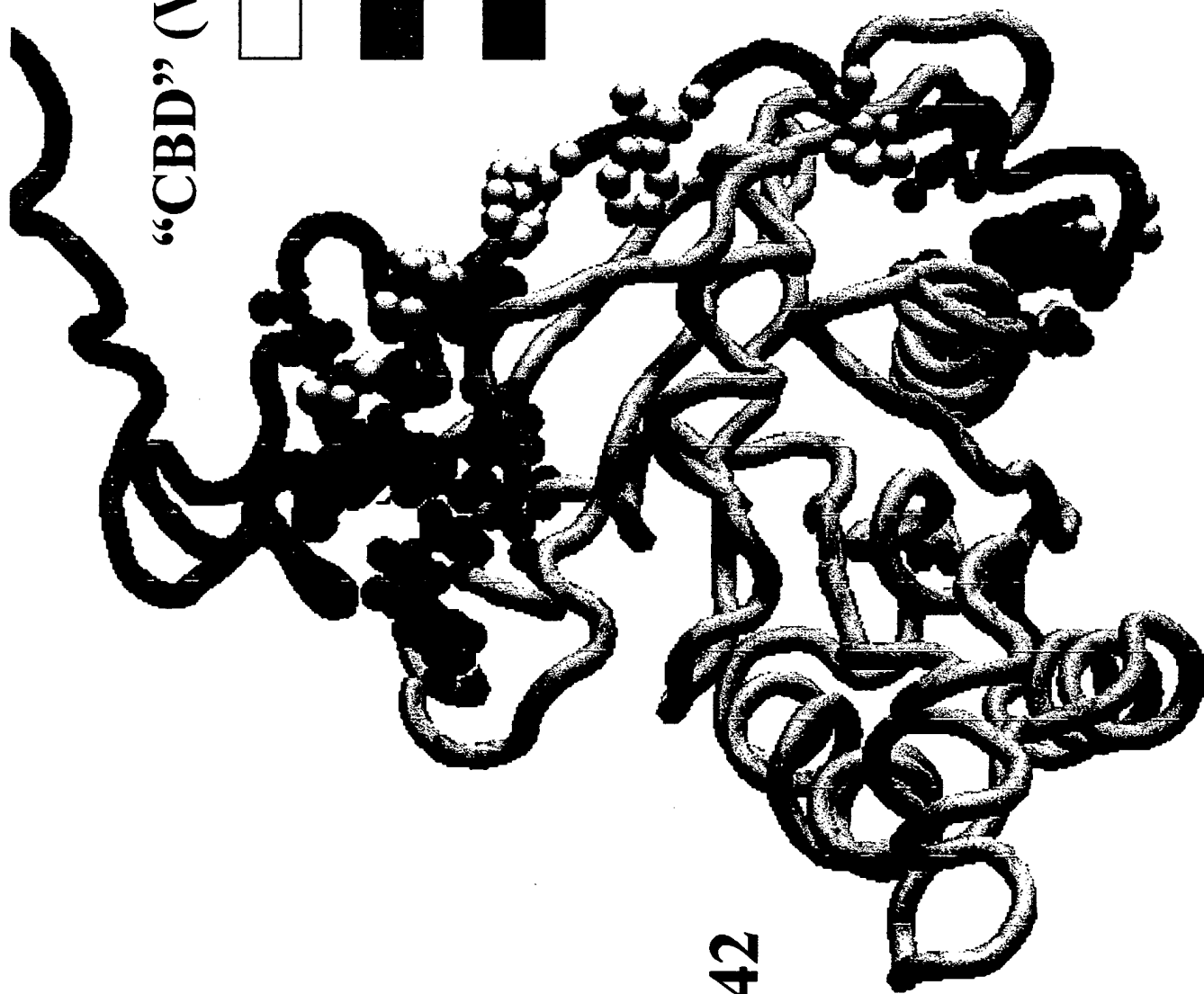


Fig. 15: Fluorescence of Mero-CBD responds to Cdc42 binding

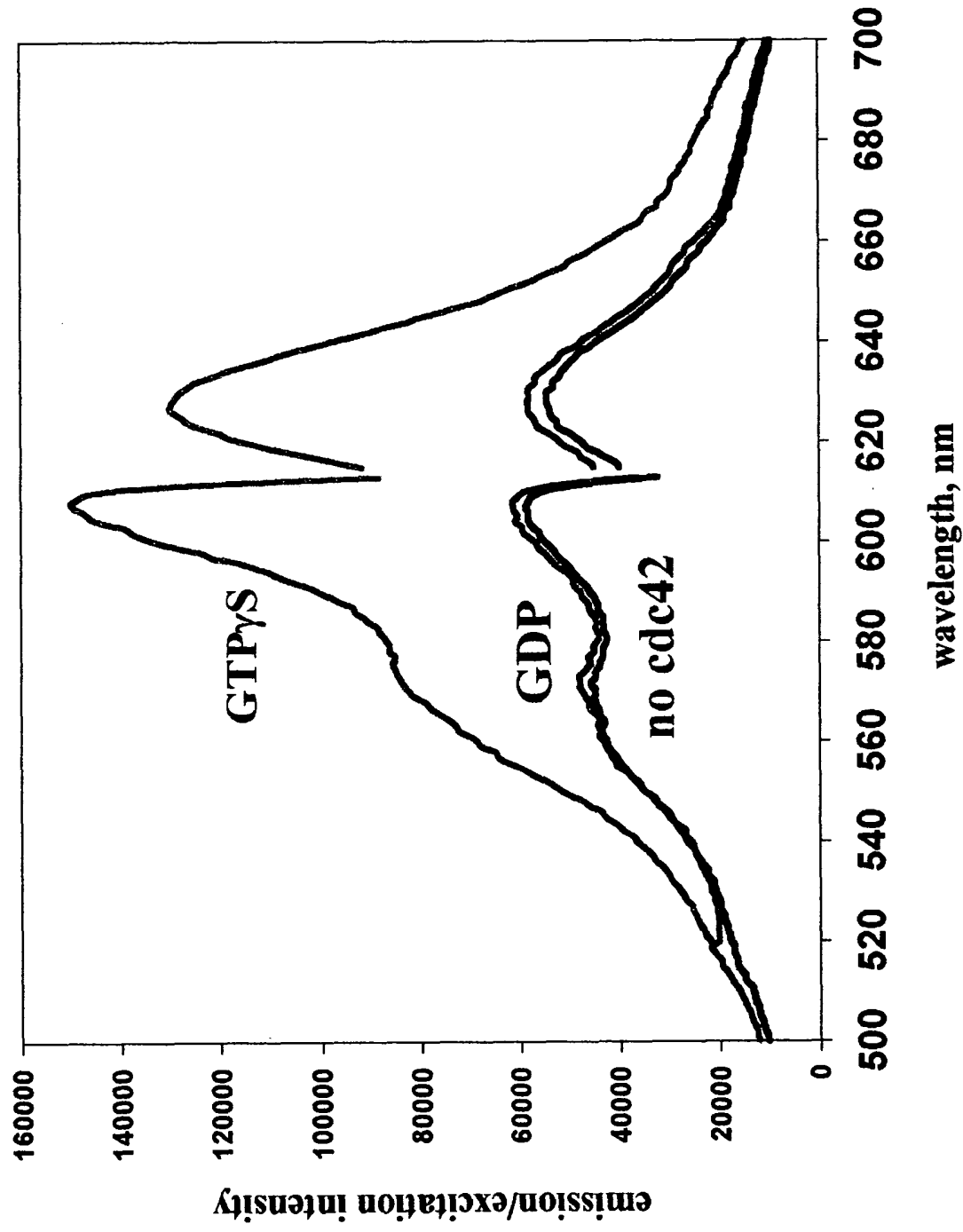
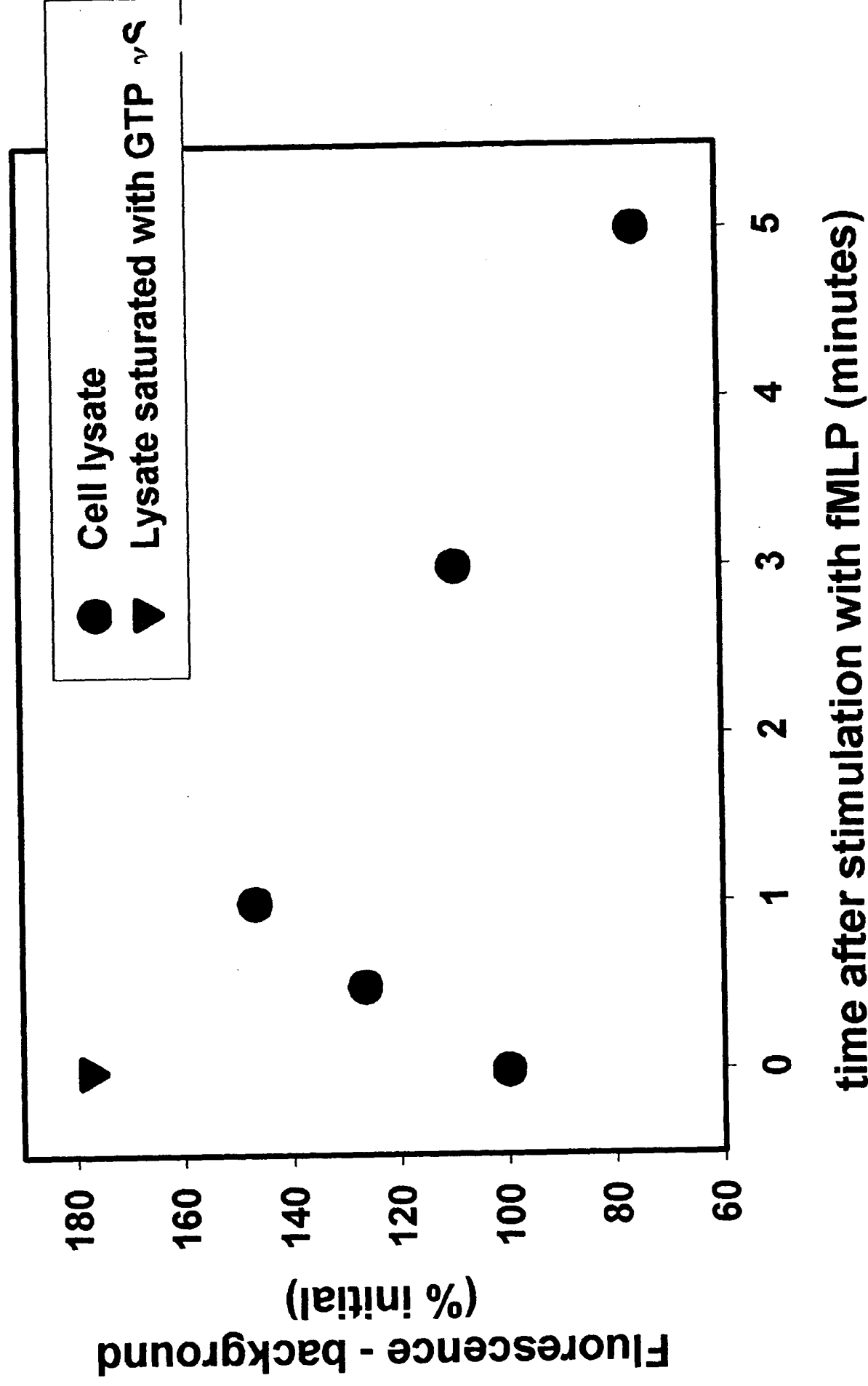


Fig. 16: Mero-CBD in neutrophil lysates



Mero-CBD
Alexa-CBD

Fig. 17



Intensity =
28 - 72



Mero-CBD

Alexa-CBD